IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

XIAOXING XI, QI LI, and JOYCE XI,

:

Plaintiffs, : CIVIL ACTION

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JURY TRIAL DEMANDED

v. : No. 17-cv-2132

UNITED STATES OF AMERICA; FBI
SPECIAL AGENT ANDREW HAUGEN;
JOHN DOE(s); CHRISTOPHER A. WRAY,
Director of the FBI, in his official capacity;
JEFFERSON B. SESSIONS III, Attorney
General of the United States, in his official
capacity; ADM. MICHAEL S. ROGERS,
Director of the National Security Agency and
Chief of the Central Security Service, in his
official capacity,

:

Defendants.

:

SECOND AMENDED COMPLAINT

I. PRELIMINARY STATEMENT

1. In May 2015, Xiaoxing Xi, a professor of physics and interim chair of the Physics Department at Temple University and a naturalized United States citizen, was indicted and arrested for allegedly sharing with entities in China information concerning a "pocket heater" belonging to Superconductor Technologies Inc. ("STI"), a United States Company. In essence, he was accused of being a technological spy for China. On May 21, 2015, his home was stormed at daybreak by FBI agents, with their weapons drawn; his wife, Professor Qi Li, and young daughters, Ms. Joyce Xi and her younger sister, held by the FBI agents at gunpoint, saw him being forcefully arrested and taken away in handcuffs; he was strip-searched and subjected to interrogation on the false premise that he was a spy; and he was told he faced charges for which

he could be imprisoned for 80 years and fined \$1 million. Over the next four months, Professor Xi lived under the cloud of this prosecution, his travel was restricted, he was suspended from his position as the interim chair of the Physics Department, he was denied access to his lab and to the graduate students working under his supervision, and he had to pay substantial legal fees to defend himself.

- 2. The charges, however, were false, malicious, and entirely fabricated. Professor Xi did not share with Chinese entities any information about the pocket heater as alleged in the Indictment. That allegation resulted directly from the actions of the lead case agent, defendant FBI Special Agent Andrew Haugen, who intentionally, knowingly, and recklessly made false statements and representations and material omissions of facts in his reports, affidavits, and other communications with federal prosecutors, thereby initiating a malicious prosecution of Professor Xi.
- 3. Before the Indictment was sought and returned, defendant Haugen knew or recklessly disregarded the fact that Professor Xi did not share with scientific colleagues in China information about the "pocket heater," but, rather, that Professor Xi only discussed technology Professor Xi invented and published. Similarly, and despite his representations to the contrary, defendant Haugen knew or recklessly disregarded the fact that the STI pocket heater was not a revolutionary device, and that its technology was publicly available.
- 4. Defendant Haugen falsely informed federal prosecutors that Professor Xi's interactions with scientific colleagues in China were for a sinister and illicit purpose. But defendant Haugen knew or recklessly disregarded the fact that the interactions Professor Xi had with Chinese colleagues were legitimate normal academic collaborations and were not part of any unlawful scheme to enrich himself. Further, defendant Haugen knew or recklessly

disregarded the fact that academic collaborations with Chinese scientists are encouraged by the federal government.

- 5. The basis of the prosecution of Professor Xi was false and collapsed by its own wrongful weight, with the Indictment against Professor Xi being dismissed on the government's motion on September 18, 2015.
- 6. This action is brought under the United States Constitution pursuant to *Bivens v*. *Six Unknown Named Agents of Federal Bureau of Narcotics*, 403 U.S. 388 (1971), for the defendants' malicious prosecution of and fabrication of evidence regarding Professor Xi in violation of the Fourth and Fifth Amendments; unlawful search and seizure of Professor Xi's home, private papers, information, communications, and belongings in violation of his Fourth Amendment rights; and racial and ethnic profiling in violation of Professor Xi's Equal Protection and Due Process rights.
- 7. This action is also brought under the Federal Tort Claims Act for the torts of malicious prosecution, invasion of privacy, negligent and intentional infliction of emotional distress, and negligence committed by federal employees and agents against Professor Xi, Qi Li, and Joyce Xi.

II. JURISDICTION AND VENUE

- 8. This Court has jurisdiction over the subject matter of this Complaint under the Fourth and Fifth Amendments to the United States Constitution and 28 U.S.C. §§ 1331 & 1346(b).
- 9. This Court has authority to issue declaratory and injunctive relief under 28 U.S.C. §§ 2201 & 2202, and under its inherent equitable powers.

- 10. On November 21, 2016, Administrative Tort Claims were submitted by all plaintiffs to the United States Department of Justice and to FBI General Counsel. Six months have passed since the filing of the administrative claims without action by the agencies.

 Plaintiffs have, therefore, exhausted all administrative remedies under 28 U.S.C. § 2675(a).
- 11. Venue is properly with this District under 28 U.S.C. § 1402(b) as the prosecution of Professor Xi occurred in the Eastern District of Pennsylvania and the defendants' acts that are the subject of this Complaint occurred in this District.

III. PARTIES

- 12. Plaintiff Xiaoxing Xi was born and educated in China, but has resided in the United States since 1989 and was at all times relevant to this complaint a naturalized United States Citizen and a resident of Penn Valley, Pennsylvania.
- 13. Plaintiff Qi Li is the wife of Xiaoxing Xi. She was born and educated in China, but has resided in the United States since 1989 and was at all times relevant to this complaint a naturalized United States Citizen and a resident of Penn Valley, Pennsylvania. Plaintiff Qi Li is a professor of physics at Pennsylvania State University. At all times relevant to this complaint Professor Li lived in the same household as Professor Xi.
- 14. Plaintiff Joyce Xi is the eldest daughter of Professor Xi and Professor Li.

 Plaintiff Joyce Xi was born in the United States and is a 2016 graduate of Yale University. At all times relevant to this Complaint, her primary residence was in Penn Valley, Pennsylvania, in the same household as Professor Xi. She was in close communication with her parents during the pendency of the criminal prosecution.
- 15. Defendant United States of America is the appropriate defendant under the Federal Tort Claims Act.

- 16. Defendant Andrew Haugen was at all times relevant to this Complaint a Special Agent employed by the Federal Bureau of Investigation ("FBI") and assigned to Chinese counterintelligence. Upon information and belief he started his employment with the FBI in approximately 2011 and is stationed out of a field office located in the Eastern District of Pennsylvania. He is sued in his individual capacity.
- 17. Defendant(s) John Doe(s) were at all times relevant to this Complaint federal law enforcement agents, supervisors, and other officials who participated in the investigation and prosecution of Professor Xi by, among other things, signing applications and affidavits for search and seizure warrants or orders, including orders under the Foreign Intelligence Surveillance Act ("FISA"), and by possessing and controlling any data and information, or copies of such data and information, seized from Professor Xi. They are sued in their individual capacities. Professor Xi does not presently know the names of these defendants but will seek leave to amend the Complaint so as to name each appropriate defendant after the completion of additional discovery.
- 18. At all times relevant to this Complaint, defendants Haugen and Doe(s) were acting within the course and scope of their employment with federal investigative and law enforcement agencies.
- 19. At all times relevant to this Complaint, defendants Haugen and Doe(s) were acting as investigative or law enforcement officers.
- 20. Defendant Christopher A. Wray is the Director of the Federal Bureau of Investigation ("FBI"). The FBI is a component of the Department of Justice ("DOJ"). Defendant Wray has authority over the FBI's searches, seizures, and retention of private communications, data, papers, and property. He is sued in his official capacity.

- 21. Defendant Jefferson B. Sessions is the Attorney General of the United States and the head of the Department of Justice. He has authority over the DOJ's searches, seizures, and retention of private communications, data, papers, and property. He is sued in his official capacity.
- 22. Defendant Adm. Michael S. Rogers is the Director of the National Security Agency and the Chief of the Central Security Service ("NSA"). He has authority over the NSA's searches, seizures, and retention of private communications, data, papers, and property. He is sued in his official capacity.
- 23. The government agencies led by defendants Wray, Sessions, and Rogers participated in the unlawful investigation and prosecution of Professor Xi, including the unlawful searches and seizures of the plaintiffs' home, private communications, data, papers, and property. The government agencies led by defendants Wray, Sessions, and Rogers continue to possess and control information and data, or copies of such information and data, seized from Professor Xi, Professor Li, and Ms. Joyce Xi.

IV. FACTUAL ALLEGATIONS

A. The Indictment

- 24. On or about May 14, 2015, a Grand Jury in the Eastern District of Pennsylvania returned an Indictment charging Professor Xi with four counts of wire fraud.
- 25. In one respect, the Indictment alleged a correct fact: that Professor Xi was a world-renowned expert in the field of magnesium diboride thin film superconducting technology.
- 26. More significantly, the Indictment *falsely* alleged that Professor Xi attempted to defraud STI in order to obtain technology regarding a Device, the STI pocket heater.

- 27. The STI pocket heater was a device used for depositing magnesium diboride thin films on flat surfaces.
- 28. The Indictment falsely alleged that the STI pocket heater "revolutionized" the field of superconducting magnesium diboride thin film growth.
- 29. In 2006, Professor Xi signed an Agreement with STI in which he leased the STI pocket heater for a period of 12 months and agreed not to reproduce, sell, transfer, or otherwise distribute the STI pocket heater.
- 30. The Indictment falsely alleged that Professor Xi "repeatedly reproduced, sold, transferred, distributed, and otherwise shared the Device and the technology of the Device" with entities in China in violation of the Agreement.
- 31. Each count of the Indictment was based on a separate e-mail that Professor Xi sent to colleagues in China and each count falsely alleged that Professor Xi had violated federal law by improperly sharing the technology of the STI pocket heater. In fact, each email was lawful and consistent with normal academic collaboration.

B. The Arrest of Professor Xi

- 32. On May 21, 2015, in the early morning hours, Professor Xi was awakened by loud knocks on his door, urgent enough that he opened the door not even fully dressed.
- 33. Professor Xi was confronted by armed FBI agents, some holding a battering ram, who immediately arrested and handcuffed him.
- 34. The armed FBI agents entered Professor Xi's house and held at gunpoint his wife, Professor Li, and two daughters, including Ms. Joyce Xi. Professor Xi's youngest daughter, who is not a named plaintiff, was only 12 years old.

- 35. As Professor Xi was taken away by the FBI, he and his family had no idea if or when they would see each other again.
- 36. Professor Xi was taken to the FBI's Philadelphia field office where he was subjected to DNA sampling, a mug shot, fingerprinting, and a two-hour interrogation. The defendants refused to inform Professor Xi of the reasons for his arrest until the end of the interrogation.
- 37. Later, after he was transferred to the custody of the United States Marshals Service, Professor Xi was ordered to strip naked and was subjected to a visual body cavity search.
- 38. At his initial appearance before a Magistrate Judge, Professor Xi was released under the supervision of United States Pretrial Services.
- 39. As a condition of his release, Professor Xi had to post \$100,000 bond, secured by his home or cash; his travel was restricted to the Eastern District of Pennsylvania; he had to surrender his passport; and he was not permitted to contact any potential prosecution witnesses in his case.
- 40. The United States Attorney's Office issued a press release regarding the Indictment. Professor Xi's arrest was publicized in national and international media, including, but not limited to, The Washington Post, The Guardian, Philadelphia Magazine, and Science Magazine. The prosecution and the press release caused Professor Xi to be falsely portrayed as an economic spy for China.

C. The Dismissal of the Indictment

41. The allegations of criminal wrongdoing in the Indictment were flatly false.

- 42. Professor Xi did not, as alleged in the Indictment, share any information regarding the STI pocket heater in violation of federal law. To the contrary, all of the emails referenced in the Indictment concerned entirely different technologies.
- 43. The STI pocket heater was a modified version of the "Kinder" pocket heater, which was invented and patented by Professor H. Kinder in Germany in the 1990s for making high-temperature superconductor thin films using a Reactive Co-Evaporation method ("RCE").
- 44. The technology of the STI pocket heater was anything but "revolutionary," having been designed on the "Kinder" model to deposit superconductor magnesium diboride thin films on flat surfaces using the RCE method.
- 45. The technology and physical components and structure of the STI pocket heater were widely known and accessible to the public, having been publicized by STI starting from a presentation at an international conference in December 2003.
- 46. None of the physical components of the STI pocket heater was considered a trade secret, nor was any physical component otherwise protected from disclosure by federal law.
- 47. In 2004, Professor Xi purchased a version of the pocket heater for his university research from Shoreline Technologies, a company owned by one of the pocket heater's two inventors. Subsequent to the sale, in 2006, STI claimed ownership of the pocket heater manufactured by Shoreline Technologies and requested that Professor Xi sign an agreement "not to reproduce, sell, transfer or otherwise distribute" the pocket heater "to any third party" as the condition for him to lease and use the pocket heater in his research for a period of 12 months. Professor Xi signed the agreement and complied in all respects with that agreement.
- 48. The allegations in the Indictment that Professor Xi's communications constituted violations of the agreement with STI were false.

- 49. The 2010 email that was the basis of Count One of the Indictment was unrelated to the STI pocket heater:
 - a. According to the Indictment, Professor Xi sent an email "confirming that certain technology had been delivered to a laboratory in China, and offering his personal assistance therewith."
 - b. That email did not reference the STI pocket heater; rather, the email referenced a tubular heating device that was to be tested on its ability to create a magnesium diboride coating inside a three-dimensional cavity using the Hybrid Physical Chemical Vapor Deposition ("HPCVD") process.
 - c. Professor Xi was collaborating with colleagues at the Shanghai Institute of Applied Physics ("SINAP"), which runs a major international user facility, to develop this tubular heating device—efforts that were consistent with normal academic collaboration.
 - d. Professor Xi and collaborators invented the HPCVD Process, which revolutionized the field of superconducting magnesium diboride thin films, and published information on that Process in 2002, prior to the development of the STI pocket heater.
 - e. The HPCVD Process created magnesium diboride thin films that were higher in quality than the films later produced by STI's pocket heater, and results from testing using several versions of the tubular heating device were later published by Professor Xi's group in academic journals.

- f. The SINAP tubular heating device that was the subject of the email referenced in Count One was entirely different from the STI pocket heater in design, construction, configuration, operating principle, and deposition process.
- 50. The 2010 emails that were the basis for Counts Two through Four were also unrelated to the STI pocket heater:
 - a. According to the Indictment, Professor Xi sent three emails "offering to build a world-class thin film laboratory in China."
 - b. These efforts were consistent with normal academic collaboration and did not reference the STI pocket heater.
 - c. Rather, these emails referenced the creation of a lab for basic research on oxide thin films with colleagues at Institute of Physics, Chinese Academy of Science and at Shanghai Jiaotong University.
 - d. Oxide thin films are materially different from magnesium diboride thin films.
 - e. As their very names suggest, oxide thin films are created with oxygen while magnesium diboride thin films are created with magnesium and boron.
 - f. Unlike magnesium diboride thin films, oxide thin films have many properties and uses other than superconductivity.
 - g. The STI pocket heater, designed to deposit magnesium diboride thin films, would have no purpose in a laboratory for basic research on oxide thin films as the technologies are entirely distinct and not compatible with one another.
- 51. Professor Xi's communications with scientific colleagues in China were entirely legal, and were normal, scientific interactions no different from thousands of similar international collaborations among scientists.

52. After Professor Xi and his defense attorneys presented this information to prosecuting authorities, the Indictment was dismissed on the government's motion on September 18, 2015.

D. The Faulty Investigation

- 53. The information presented to prosecuting authorities by Professor Xi and his counsel was, in fact, already known or recklessly disregarded by defendant Haugen, who was the FBI lead case agent in the investigation which led directly to the false charges against Professor Xi.
- 54. Defendant Haugen intentionally, knowingly and/or recklessly made or caused to be made false statements and representations and material omissions of facts in his reports, affidavits, and other communications with federal prosecutors, thereby initiating a malicious prosecution of Professor Xi, as evidenced by false allegations made in the indictment and false testimony given by Defendant Haugen before the grand jury.
- 55. Defendant Haugen's intentional, knowing and/or reckless false statements and representations and material omissions of fact include:
 - a. The false assertion that Professor Xi had built a version of the pocket heater for SINAP. Defendant Haugen knew or recklessly disregarded the fact that the tubular heating device Professor Xi discussed with colleagues at SINAP was an entirely different device. Defendant Haugen was told by an inventor of the STI pocket heater that the diagrams of the SINAP tubular heating device were not related to the STI pocket heater but, rather, the HPCVD process Professor Xi invented.

- b. The false assertion that the STI pocket heater was a "revolutionary" device.
 Defendant Haugen was informed that the STI pocket heater was not protected or considered a trade secret. Defendant Haugen knew that the STI pocket heater was a modification of an existing "Kinder" pocket heater that had been created in the 1990s, and he knew that the technology was widely known and shared in the relevant scientific community.
- c. The false assertion that Professor Xi repeatedly sought to orchestrate a scheme to obtain the STI pocket heater technology. Defendant Haugen knew or recklessly disregarded the fact that at the time he alleged Professor Xi initiated this scheme, STI had not yet invented the pocket heater. Defendant Haugen knew or recklessly disregarded the fact that STI solicited Professor Xi's help in securing funding for and developing the STI pocket heater before and during his sabbatical leave at Stanford University and STI. Defendant Haugen knew or recklessly disregarded the fact that, as a world-renowned expert in the field of magnesium diboride thin film technology and inventor of the HPCVD process that produces higher quality magnesium diboride thin films than the STI pocket heater, there was no need for Professor Xi to orchestrate a scheme to obtain the publicly available technology of the STI pocket heater.
- d. The false assertion that Professor Xi purchased a pocket heater from STI with fraudulent intent to violate a non-disclosure agreement. Defendant Haugen knew that Professor Xi did not purchase the pocket heater from STI, but from Shoreline Technologies, owned by one inventor of the pocket heater, and that Professor Xi signed a non-disclosure agreement only after STI claimed

- ownership of the pocket heater and requested that Professor Xi sign the agreement as the condition for him to lease the pocket heater after Professor Xi made the purchase from Shoreline Technologies.
- e. The false assertion that Professor Xi had transmitted diagrams and/or photographs of the STI pocket heater to colleagues at Peking University. Defendant Haugen was in possession of Professor Xi's emails and was in possession of schematics attached to those emails. Based on these emails, Defendant Haugen knew or recklessly disregarded the fact that Professor Xi never sent a photograph of the STI pocket heater to colleagues at Peking University. Based on these emails, Defendant Haugen knew or recklessly disregarded the fact that the schematics attached to the emails were of the HPCVD process Professor Xi invented, which was entirely different from the STI pocket heater.
- f. The false assertion that Professor Xi had transmitted photographs of the STI pocket heater to colleagues at Tsinghua University. Based on Professor Xi's emails, Defendant Haugen knew or recklessly disregarded the fact that Professor Xi never sent a photograph of the STI pocket heater to colleagues at Tsinghua University and that his emails with colleagues there involved a separate heater for the creation of oxide films—an entirely different technology from the STI pocket heater.
- g. The false assertion that Professor Xi had repeatedly shared samples produced by the pocket heater with entities in China. Based on Professor Xi's emails, Defendant Haugen knew or recklessly disregarded the fact that Professor Xi

never sent samples produced by the pocket heater to colleagues in China and that the exchanges of samples and test results that Professor Xi engaged in with colleagues in China were consistent with normal academic collaboration and did not involve the STI pocket heater.

- 56. Defendant Haugen intentionally, knowingly, and/or recklessly provided federal prosecutors with false scientific opinions and conclusions regarding Professor Xi's communications with entities in China. Defendant Haugen had no scientific or other basis to allege that Professor Xi's communications with China were illegal or involved the illegal transmission of protected technologies.
- 57. Defendant Haugen intentionally, knowingly, and/or recklessly made false statements and representations to federal prosecutors concerning Professor Xi's scientific collaborations with colleagues in China. Defendant Haugen knew that as an active researcher Professor Xi collaborated broadly with scientists around the world, including scientists from China. Additionally, defendant Haugen knew or recklessly disregarded the fact that Professor Xi's interactions with Chinese colleagues were legitimate and normal academic collaborations that were part of his university responsibilities and scientific pursuit, fully disclosed, and consistent with commonly accepted practices, and were not part of any unlawful scheme to enrich Professor Xi. In spite of this knowledge, defendant Haugen falsely informed federal prosecutors that Professor Xi's normal academic collaborations in China were for a nefarious purpose.
- 58. The actions of defendant Haugen in intentionally, knowingly and/or recklessly providing false information to federal prosecutors and in failing to provide evidence of a clearly exculpatory nature, were done with the intent and purpose of initiating a malicious prosecution

of Professor Xi, and these communications in fact led directly to the false indictment and prosecution.

- 59. Defendant Haugen's deliberate and/or reckless falsifications and withholding of exculpatory evidence caused the issuance of orders under FISA. For each FISA order issued, on information and belief, there were known and/or reckless false statements and representations and material omissions of facts in the affidavits of probable cause and other submissions made in support of the orders.
- 60. On information and belief, both before and after obtaining the FISA orders, defendant Haugen and/or Doe(s) caused the interception of Professor Xi's communications, including his emails, text messages, and/or phone calls, without obtaining a warrant from any court. In conducting this surveillance, the defendants relied on the purported authority of Section 702 of FISA and/or Executive Order 12333. Although neither Section 702 nor Executive Order 12333 permits the government to "target" Americans directly, the FBI and NSA nonetheless frequently rely on these authorities to obtain without a warrant the communications of Americans who are in contact with individuals abroad—as Professor Xi was with his family and in the course of his scientific and academic work—in violation of the Fourth Amendment.
- 61. According to press reports, the government, acting through the NSA, has engaged in extensive and concerted warrantless surveillance of Chinese universities and scientific research institutions. On information and belief, this warrantless surveillance includes the collection of communications in bulk, whereby virtually *all* messages and data on a system or network are captured.¹ It also includes surveillance directed at particular organizations,

¹ The government has acknowledged that it engages in the bulk interception and collection of communications under Executive Order 12333. White House, Presidential Policy Directive/PPD-28 (Jan. 17, 2014), https://fas.org/irp/offdocs/ppd/ppd-28.pdf.

individuals, and Internet addresses. For example, the government has obtained certifications under Section 702 that specifically authorize warrantless surveillance related to the Chinese government and its components. Among the Chinese universities and scientific research institutions subject to warrantless surveillance prior to Professor Xi's arrest was state-run Tsinghua University, where the NSA siphoned data off of computers, servers, and network backbones carrying the communications of tens of millions of people and connecting thousands of other Chinese research institutions, including Peking University and Shanghai Jiaotong University.

- 62. In the course of his work, Professor Xi frequently communicated with his scientific counterparts at Tsinghua University, Peking University, and Shanghai Jiaotong University, as well as scientists at many other Chinese research institutions. On information and belief, those communications were intercepted pursuant to Section 702 and/or Executive Order 12333. Indeed, in falsely asserting that Professor Xi had transmitted photographs of the STI pocket heater, defendant Haugen referenced intercepted emails between Professor Xi and scientists at Tsinghua University. Moreover, all four of the emails relied upon by the government in its dismissed indictment were emails between Professor Xi and scientists working at Chinese research institutions. One of those emails included a scientist who was then serving as Chair of the Physics Department at Shanghai Jiaotong University in a part-time academic appointment, and another included scientists at Peking University.
- 63. Once collected, communications acquired under Section 702 or Executive Order 12333 are amassed in government databases where, pursuant to agency procedures, they are

generally retained by default for years. During that time, they can be searched, reviewed, analyzed, and shared with other agencies with few meaningful restrictions.²

- 64. On information and belief, defendant Haugen and/or defendant Does searched law enforcement and investigative databases for communications of Professor Xi that the government had intercepted without a warrant—including his private communications intercepted under Section 702 of FISA and/or Executive Order 12333—and examined, retained, and/or used such communications. As the Privacy and Civil Liberties Oversight Board has reported, FBI agents conduct such database searches as a matter of course in investigations like that of Professor Xi.³ These database searches are so common in FBI investigations that the government has referred to them as the "FBI's Google." They are designed to identify and exploit the communications of Americans that the government has intercepted without a warrant.
- 65. On information and belief, defendant Haugen and/or defendant Does relied on information obtained or derived from warrantless surveillance, including Professor Xi's private communications intercepted under Section 702 of FISA and/or Executive Order 12333, in affidavits, applications, and other materials submitted in support of FISA orders and search warrants targeting Professor Xi. FBI agents regularly use communications that the government has obtained without a warrant during the early stages of their investigations. The government then relies on these warrantless sources of information in the applications it submits to the FISA Court, in order to justify further searches or surveillance of the person. On information and belief, the affidavits, applications, and other materials submitted in support of the FISA orders

² See, e.g., U.S. Signals Intelligence Directive SP0018 (Jan. 25, 2011), https://perma.cc/SH4G-XJUW.

³ Privacy and Civil Liberties Oversight Board, *Report on the Surveillance Program Operated Pursuant to Section 702* (July 2, 2014), https://www.pclob.gov/library/702-report.pdf.

targeting Professor Xi relied on the warrantless surveillance of his communications—and, as a result, contain evidence of that warrantless surveillance.

- 66. Even when the government uses information obtained or derived from warrantless surveillance in the course of a criminal investigation, it regularly fails to disclose that fact to individuals it seeks to prosecute, like Professor Xi.
- 67. After the arrest of Professor Xi, defendant Haugen made or caused to be made known and/or reckless false statements and representations and material omissions of facts in an affidavit for a search warrant which led to the seizure of property of Professor Xi, Professor Li, and their two daughters, including Ms. Joyce Xi, in the late afternoon of May 21, 2015, including the seizure of electronic devices (including computers, cell phones, and data storage devices); travel records; financial records, including tax returns, bank statements, and credit reports; and other records of personal and business activities.
- 68. Over a period of 10 months, from 2014-2015, at least three federal criminal indictments of Chinese-American scientists were dismissed prior to any trial. This includes dismissal of the cases against Professor Xi (case dismissed in September 2015), Sherry Chen, a hydrologist with the U.S. National Weather Service in Ohio (case dismissed in March 2015), and Guoqing Cao and Shuyu Li, senior biologists at Eli Lilly & Company (cases dismissed in December 2014).
- 69. As a Special Agent employed by the FBI working on Chinese counterintelligence, defendant Haugen's investigation of Professor Xi was predicated at least in part on the fact that Professor Xi is racially and ethnically Chinese, and was, prior to his naturalization as a United States citizen, a Chinese national.

- 70. Defendant Haugen considered Professor Xi's race and ethnicity in providing false information and withholding exculpatory evidence from prosecutors with the intent to secure false charges against Professor Xi.
- 71. Upon information and belief, the John Doe defendants assisted and cooperated with defendant Haugen in the activities described above and knowingly and/or recklessly made false statements and representations and material omissions of facts in relevant affidavits and/or communications with federal prosecutors, thus leading to the wrongful and malicious prosecution of Professor Xi.
- 72. At all times relevant to this Complaint, the conduct of defendants Haugen and Doe(s) was extreme and outrageous and was in willful, reckless and callous disregard of the plaintiffs' rights under federal and state law.
- 73. The actions of defendants Haugen and Doe(s) were in violation of a duty of care owed to plaintiffs.
- 74. The actions of defendants Haugen and Doe(s) constituted a crime, actual fraud, actual malice and/or willful misconduct.
- 75. The actions of defendants Haugen and Doe(s) and other employees of the United States caused publicity falsely portraying Professor Xi as a spy for China. Defendants Haugen and Doe(s) were aware that press releases regarding indictments are regularly issued by the United States Attorney's Office and that the arrest and prosecution of Professor Xi on these false charges would be publicized. Defendants Haugen and Doe(s) and other employees of the United States were also aware that their choice to conduct an early morning raid and arrest at Professor Xi's home, instead of allowing him to turn himself in, would cause and increase publicity falsely portraying Professor Xi as a dangerous spy for China.

E. Injuries to Professor Xi, Professor Li, and Ms. Joyce Xi

- 76. As a direct and proximate result of the conduct of defendants Haugen and Doe(s), Professor Xi, Professor Li, and Ms. Joyce Xi suffered substantial damages, including loss of liberty, invasion of privacy, substantial emotional distress and harm, loss of reputation, and physical harms caused by the emotional distress, including difficulty sleeping, nightmares, difficulty focusing on daily tasks, and changed behavior in work practices. In addition, Professor Xi has suffered substantial economic damage, including loss of income and loss of future earnings, and costs and expenses in defending against false criminal charges.
- 77. In causing the arrest of Professor Xi, defendant Haugen was responsible for the unannounced, early morning raid and armed invasion of the home of Professor Xi and his family, including Professor Li and Ms. Joyce Xi.
- 78. The agents entered the house with firearms displayed, forcibly removed Qi Li, Joyce Xi, and Professor Xi's youngest daughter, who was only 12 years old, from their respective bedrooms, handcuffed Professor Xi, and refused to provide any information as to the grounds for arrest.
- 79. These terrifying actions (as if the agents were dealing with an armed, dangerous terrorist) were followed by additional searches of Professor Xi (DNA and strip searches) and an interrogation with false accusations that Professor Xi had violated federal law in his communications with associates in China.
- 80. Professor Xi, who was innocent of all of the charges, believed that he was being prosecuted for no legal reason and because of ethnic bias and prejudice directed at him and other Chinese-American academics and scientists who were engaged in research with colleagues in China.

- 81. Professor Xi and the members of his family, including Professor Li and Ms. Joyce Xi, feared that this criminal prosecution would result in his wrongful conviction and the destruction of all that Professor Xi had built and established in his personal and professional lives.
- 82. Professor Xi, Professor Li, and Ms. Joyce Xi are in fear of additional illegal surveillance and other actions by the government. Having experienced a prosecution that resulted from innocent communications and research, and having been subjected to false charges, Professor Xi, Professor Li, and Ms. Joyce Xi fear that their current and future words, phone calls, emails, and actions, however innocent, may be similarly misused by the government.
- 83. Defendants caused the wide-ranging searches without probable cause of Professor Xi's, Professor Li's, and Ms. Joyce Xi's telephone conversations, emails, and/or text messages, thus subjecting Professor Xi, Professor Li, and Ms. Joyce Xi to broad invasions of their private communications.
- 84. On information and belief, records of these private communications, and information derived from the communications, are currently in the possession of the government, including the FBI, DOJ, and/or NSA.
- 85. Defendants caused the search and/or seizure without probable cause of the personal belongings, including the computers, other electronic devices, and private papers, of Professor Xi, Professor Li, and Ms. Joyce Xi, thereby depriving them of the use of these belongings and subjecting them to broad invasions of their private information.
- 86. On information and belief, copies of the private data stored on the computers and other electronic devices of Professor Xi, Professor Li, and Ms. Joyce Xi, including the full contents of their devices and information derived from that data, are currently in the possession

of the government, including the FBI, DOJ, and/or NSA. Similarly, on information and belief, copies of the private papers of Professor Xi, Professor Li, and Ms. Joyce Xi, and information derived from their papers, are currently in the possession of the government, including the FBI, DOJ, and/or NSA.

- 87. The prosecution of Professor Xi was widely reported in national and international media and Professor Xi was portrayed as an economic spy for China. The articles included photographs of Professor Xi, causing him and his family to fear being in public where they would be recognized. Professor Xi, Professor Li, and Ms. Joyce Xi hid from their windows in their home in order to avoid news cameras that were attempting to film them. This publicity and the portrayal of Professor Xi as a spy compounded the emotional distress caused to Professor Xi and his family and further damaged their respective reputations and academic careers.
- 88. The malicious prosecution of Professor Xi proximately caused harm to Professor Xi's professional pursuits and career and have and will continue to have an adverse impact on his academic career.
- 89. As a result of his arrest, Professor Xi was placed on administrative leave and was suspended as interim chair of the Physics Department of Temple University. Only two days prior to his arrest, Professor Xi had been told by the Dean of the University that he would be appointed the permanent chair of the Physics Department. He lost this opportunity due to the false allegations that he was engaged in criminal conduct.
- 90. The malicious prosecution of Professor Xi proximately caused harm to his professional stature due to his inability to conduct research under his research grants from the federal government during the months following his arrest, including:

- a. At the time of his arrest, Professor Xi was responsible for oversight of nine research projects as Principle Investigator or co-Principle Investigator. These were funded by the federal government for over \$1 million a year, which supported the work, salaries, and tuition of ten graduate students, two research faculty members and two postdoctoral scholars.
- After his arrest, the role of the Principal Investigator was transferred to other investigators.
- c. As a result of his arrest, Professor Xi was not allowed to appear on campus and talk to his students.
- d. As a result of the prosecution of Professor Xi, he was not able to conduct research for more than four months, losing valuable time in his state-of-the-art research.
- e. As a result of the prosecution, Professor Xi lost summer salaries; a university professor is paid only nine months of salary and may earn payment over the summer months from research funding.
- 91. Because of the prosecution, Professor Xi fears that engaging in lawful activities related to his university responsibilities, including advising Chinese students, hosting Chinese visitors, recommending students for employment in China, engaging in joint research projects and exchanging ideas and samples with Chinese colleagues, and serving on proposal review panels in China could result in further false prosecution.
- 92. The malicious prosecution and related events prejudice and will continue to prejudice Professor Xi with respect to future grant proposals and thus reduce his opportunities

for advising graduate students to conduct research, which is a critical measure of performance for a professor at a major research university.

- 93. The malicious prosecution and related events prejudice and will continue to prejudice Professor Xi with respect to his future opportunities to advance in administrative positions, causing harm to his stature and future earnings.
- 94. The malicious prosecution and related events prejudice and will continue to prejudice Professor Xi with respect to his ability to establish future scientific collaborations with scientists in the United States, China, and around the world, causing significant damage to his research and his performance as a professor at a major research university.
- 95. As a result of the defendants' actions, Professor Xi suffered from severe emotional trauma and distress. Some of his injuries manifested themselves immediately and physically in loss of appetite, difficulty sleeping, and physical and mental exhaustion. He suffered from difficulty concentrating, lack of patience, and shortness of temper. These injuries are ongoing and continuous. He also experiences fear of unfair consequences in carrying out routine job activities, such as serving as Principle Investigator in grant proposals.
- 96. As a result of the defendants' actions, Professor Qi Li suffered from severe emotional trauma and distress. Some of her injuries manifested themselves immediately and physically in lack of sleep, loss of appetite, weight loss, and joint pains. The joint pains include shoulder, neck and elbow pain and lack of mobility, requiring physical therapy. The emotional trauma and distress also caused severe back pain which resulted in an inability to sit, stand, or walk for two weeks. Professor Li continues to suffer from joint and back pain and weakness. The emotional distress also caused depression, anxiety, memory deterioration, deterioration in her eyesight, and difficulty focusing on daily professional and personal tasks. Professor Li

experienced and continues to experience overwhelming fear, shortness of breath and tightness in her stomach and throat. Due to the mental and physical symptoms of her emotional distress, Professor Li was forced to take sick leave from her duties as a professor at a major research university. She was unable to teach classes and focus on her research, nor was she able to give research presentations at university seminars and international conferences. As a result of her emotional trauma and distress, Professor Li withdrew from her social contacts. Professor Li has sought treatment for these conditions from her physician and other specialists.

97. As a result of the defendants' actions, Ms. Joyce Xi experienced severe emotional trauma, anxiety and distress, which manifested in immediate, physical symptoms including difficulty sleeping and loss of appetite. Ms. Xi was a 22-year-old college student entering her final semester at Yale during her father's prosecution. As a result of reports of her father being a spy, she feared returning to school and withdrew from and limited social contacts. She had trouble focusing on schoolwork and job searches. She continues to face difficulties in concentrating on everyday professional and personal tasks. Ms. Xi has sought treatment for these conditions from a psychologist.

V. CLAIMS

Count I

Plaintiff Xiaoxing Xi v. Defendants Haugen and John Doe(s)
Federal Constitutional Claim – Malicious Prosecution and Fabrication of Evidence

98. The actions of defendants Haugen and Does violated Professor Xi's clearly established right to be free from malicious prosecution and the fabrication of evidence under the Fourth and Fifth Amendments.

- 99. As the lead case agent and investigator, defendant Haugen initiated the prosecution of Professor Xi, did so without probable cause and acted with improper motives and purposes.
- 100. Professor Xi suffered a deprivation of liberty as a result of the prosecution. The charges against Professor Xi were dismissed prior to trial and, therefore, terminated favorably to Professor Xi.

Count II

Plaintiff Xiaoxing Xi v. Defendants Haugen and Doe(s) Federal Constitutional Claim – Equal Protection and Due Process Violation

- 101. The actions of defendants Haugen and Does violated Professor Xi's clearly established equal protection and due process rights under the Fifth Amendment.
- 102. Defendant Haugen's investigation and initiation of prosecution against Professor Xi were based on impermissible racial and ethnic factors, and specifically on Professor Xi's Chinese ethnicity, his former status as a Chinese national, and the fact that his communications were with Chinese entities.

Count III

Plaintiff Xiaoxing Xi v. Defendants Haugen and Doe(s) Federal Constitutional Claim – Unlawful Search and Seizure of Property and Belongings

- 103. Defendants Haugen and Doe(s) caused a search of the home and belongings of Professor Xi without probable cause, thereby violating his clearly established constitutional rights under the Fourth Amendment.
- 104. Defendants Haugen and Doe(s) caused a search of Professor Xi's offices without probable cause, thereby violating his clearly established constitutional rights under the Fourth Amendment.

105. Defendants Haugen and Doe(s) made or caused to be made knowingly and recklessly false statements and representations or material omissions of facts in an affidavit for a search warrant, which led to the search and seizure of Professor Xi's private information and property, including the search and seizure of his computers.

Count IV Plaintiff Xiaoxing Xi v. Defendant United States of America Federal Tort Claims Act – Malicious Prosecution

- 106. Through their actions, defendants Haugen and Doe(s) initiated the prosecution of Professor Xi without probable cause and with malice. This constituted the tort of malicious prosecution under the laws of the Commonwealth of Pennsylvania.
- 107. Under the Federal Tort Claims Act, defendant United States of America is liable for these actions.

Count V

Plaintiffs Xiaoxing Xi, Qi Li, and Joyce Xi v. Defendant United States of America Federal Tort Claims Act – Invasion of Privacy – Intrusion upon Seclusion

- 108. Defendants Haugen and Doe(s) physically intruded into the private home of Professor Xi, Professor Li and Ms. Joyce Xi. Defendant Haugen and Doe(s) examined, investigated, and searched the private belongings and property of Professor Xi, Professor Li, and Ms. Joyce Xi. Defendant Haugen and Doe(s) intercepted, read, listened to, and/or monitored the private communications of Professor Xi, Professor Li, and Ms. Joyce Xi. These intrusions, searches, examination, investigations, and interceptions were unreasonable and were undertaken without probable cause and/or exigent circumstances.
- 109. These actions constituted the tort of invasion of privacy intrusion upon seclusion under the laws of the Commonwealth of Pennsylvania.

110. Under the Federal Tort Claims Act, defendant United States of America is liable for these actions.

Count VI Plaintiff Xiaoxing Xi v. Defendant United States of America Federal Tort Claims Act – Invasion of Privacy – False Light

- 111. The actions of defendants Haugen and Doe(s) and other employees of the United States caused the public placement of Professor Xi in a false light. Their actions caused him to be falsely portrayed as a spy in national and international media, a label that is highly offensive to any reasonable person. Defendants Haugen and Doe(s) and other employees of the United States had knowledge and/or acted in reckless disregard as to the falsity of the publicized matter and the false light in which Professor Xi would be placed.
- 112. The actions of defendants Haugen and Doe(s) and other employees of the United States constituted the tort of false light invasion of privacy under the laws of the Commonwealth of Pennsylvania.
- 113. Under the Federal Torts Claims Act, defendant United States of America is liable for these actions.

Count VII

Plaintiffs Xiaoxing Xi, Qi Li, and Joyce Xi v. Defendant United States of America Federal Tort Claims Act – Intentional Infliction of Emotional Distress

114. The actions of defendants Haugen and Doe(s) in causing the malicious prosecution of Professor Xi, in causing the invasion of Professor Xi's, Professor Li's and Ms. Joyce Xi's privacy, in targeting Professor Xi partly on the basis of his race and ethnicity, in causing the early morning arrest of Professor Xi and the invasion of his family's home with guns and a battering ram, and in causing Professor Xi's family to be removed from their bedrooms at gunpoint were outrageous and extreme. Defendants Haugen and Doe(s) acted intentionally or

recklessly and their actions caused all plaintiffs severe emotional distress that manifested itself in physical symptoms.

- 115. The actions of defendants Haugen and Doe(s) constituted the tort of intentional infliction of emotional distress under the laws of the Commonwealth of Pennsylvania.
- 116. Under the Federal Tort Claims Act, defendant United States of America is liable for these actions.

Count VIII

Plaintiffs Qi Li and Joyce Xi v. Defendant United States of America Federal Tort Claims Act – Negligent Infliction of Emotional Distress

- 117. Plaintiffs Qi Li and Joyce Xi contemporaneously observed the tortious injuries caused to Professor Xi by the actions of defendants Haugen and Doe(s) in initiating the malicious prosecution of Professor Xi, in invading Professor Xi's privacy, in targeting Professor Xi partly on the basis of his race and ethnicity, and in causing the early morning arrest of Professor Xi and the invasion of his home with guns and a battering ram.
- 118. As a direct and proximate result of defendants Haugen and Doe(s)' actions, Plaintiffs Qi Li and Joyce Xi suffered emotional trauma and distress which manifested itself in immediate and substantial physical injuries including, but not limited to, difficulty sleeping, loss of appetite, weight loss, and joint pains.
- 119. The actions of defendants Haugen and Doe(s) constituted the tort of negligent infliction of emotional distress under the laws of the Commonwealth of Pennsylvania.
- 120. Under the Federal Tort Claims Act, defendant United States of America is liable for these actions.

Count IX

Plaintiffs Xiaoxing Xi, Qi Li, and Joyce Xi v. Defendant United States of America Federal Tort Claims Act – Negligence

- 121. Defendants Haugen and Doe(s) owed a duty of care to Professor Xi, Professor Li and Ms. Joyce Xi. Their actions as described above violated that duty of care and were a direct and proximate cause and a substantial factor in plaintiffs' injuries as described above.
- 122. Defendants Haugen and Doe(s)' actions constituted the tort of negligence under the laws of the Commonwealth of Pennsylvania.
- 123. Under the Federal Tort Claims Act, defendant United States of America is liable for these actions.

Count X

Plaintiffs Xiaoxing Xi, Qi Li, and Joyce Xi v. Defendants Wray, Sessions, and Rogers Federal Constitutional Claim – Return and Expungement of Information and Property Unlawfully Searched and Seized

124. As alleged above, the FBI, DOJ, and NSA, through their agents defendants

Haugen and Doe(s), subjected Professor Xi, Professor Li, and Ms. Joyce Xi to unlawful searches
and seizures pursuant to:

Search Warrants

- 125. The FBI, DOJ, and/or NSA caused a search of the home and belongings of Professor Xi, Professor Li, and Ms. Joyce Xi without probable cause, thereby violating their clearly established constitutional rights under the Fourth Amendment.
- 126. The FBI, DOJ, and/or NSA caused a search of Professor Xi's offices without probable cause, thereby violating his clearly established constitutional rights under the Fourth Amendment.
- 127. The FBI, DOJ, and/or NSA made or caused to be made knowingly and recklessly false statements and representations or material omissions of facts in an affidavit for a search

warrant, which led to the search and seizure of Professor Xi's, Professor Li's, and Ms. Joyce Xi's private information and property, including the search and seizure of their computers.

FISA Orders

- 128. The FBI, DOJ, and/or NSA caused the interception of Professor Xi's communications, or the search and seizure of his property, including his computers, emails, text messages, and/or phone calls pursuant to FISA orders obtained without probable cause, thereby violating Professor Xi's clearly established constitutional rights under the Fourth Amendment.
- 129. The FBI, DOJ, and/or NSA caused the interception of Professor Li's, and Ms. Joyce Xi's communications, including their emails, text messages, and/or phone calls with Professor Xi pursuant to FISA orders obtained without probable cause, thereby violating Professor Li's and Ms. Joyce Xi's clearly established constitutional rights under the Fourth Amendment.
- 130. The FBI, DOJ, and/or NSA made or caused to be made knowingly and recklessly false statements and representations or material omissions of facts in applications for FISA orders, which led to the search and seizure of Professor Xi's, Professor Li's, and Ms. Joyce Xi's private information and property.

Warrantless Surveillance

- 131. The actions of the FBI, DOJ, and/or NSA in causing the interception of Professor Xi's communications, including his emails, text messages, and/or phone calls, without obtaining a warrant and without notice to Professor Xi, violated Professor Xi's clearly established constitutional rights under the Fourth Amendment.
- 132. The actions of the FBI, DOJ, and/or NSA in searching law enforcement and investigative databases for, examining, retaining, and using Professor Xi's communications,

including his emails, text messages, and/or phone calls, that were obtained without a warrant, and without notice to Professor Xi, violated Professor Xi's clearly established constitutional rights under the Fourth Amendment.

Retention of Plaintiffs' Private Information and Property

- 133. On information and belief, the FBI, DOJ, and NSA continue to retain copies of the private communications, data, and papers of Professor Xi, Professor Li, and Ms. Joyce Xi obtained through the unlawful searches and seizures. This information includes, but is not limited to, the full contents of their computers and/or other electronic devices. On information and belief, the FBI, DOJ, and NSA also continue to retain records that contain information derived from the unlawful searches and seizures.
- 134. On information and belief, the FBI, DOJ, and NSA are storing the private information of Professor Xi, Professor Li, and Ms. Joyce Xi in law enforcement and investigative databases, where that information is routinely searched by agents in the course of wholly unrelated investigations. For example, information obtained under FISA, Section 702, and Executive Order 12,333 is regularly stored in law enforcement and investigative databases, and agents around the country routinely search through that information even at the earliest stages of their investigations.
- 135. The retention of Professor Xi's, Professor Li's, and Ms. Joyce Xi's private communications, data, and papers by the FBI, DOJ, and NSA violates the plaintiffs' privacy interest in this information and interferes with their ability to control this sensitive information. The retention of this information, obtained through unlawful searches and seizures, continues to violate Professor Xi's, Professor Li's, and Ms. Joyce Xi's rights under the Fourth Amendment.

Wherefore, plaintiffs Xiaoxing Xi, Qi Li, and Joyce Xi respectfully request:

- A. Compensatory damages as to defendants Haugen, Doe(s), and the United States;
- B. Punitive damages as to defendants Haugen and Doe(s);
- C. An injunction requiring defendants Wray, Sessions, and Rogers to return to plaintiffs all information in their custody or control obtained from plaintiffs' electronic devices, communications, and papers; and, to the extent that information cannot be returned, to expunge or otherwise destroy that information;
- D. A declaration that defendants violated the Fourth and Fifth Amendment rights of plaintiffs by depriving Professor Xi of equal protection under the law, by subjecting Professor Xi to a malicious prosecution, and by subjecting all plaintiffs to unlawful searches and seizures;
- E. Reasonable attorneys' fees and costs as to all defendants;
- F. Such other and further relief as may appear just and appropriate.

Plaintiffs hereby demand a jury trial as to the claims asserted in Counts I-III.

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